

REMARKS

The application has been fully reviewed in light of the Office Action dated October 5, 2004. Claims 1-20 are pending, with claims 1, 15 and 18-20 being independent. Each of the independent claims, as well as claim 4, has been amended to correct minor informalities in each claim.

§103 Rejection

Claim 1-20 were rejected under 35 U.S.C. §103 as reciting subject matter that would have been obvious over U.S. patent no. 6,728,706 (Aggarwal et al.) in view of U.S. published patent application no. 2002/0194074 A1 (Jacobs). For the following reasons, Applicants respectfully traverse this rejection, and submit that the claimed invention is patentable over the prior art.

The Invention

Claim 1 is directed to a method of optimizing a value associated with a characteristic of a product stored in a first field of a security database of a self-checkout system at an optimizing time. The security database also includes a second field for storing identification information for the product, a third field for storing a last time when the value was last updated and a fourth field for storing at least one new value for the characteristic stored in the first field between the last time and said optimizing time. The value being used in a comparison to a second value associated with the characteristic and detected in a security area of the self-checkout system during a purchasing transaction. The comparison used as a security measure to confirm that a product placed in the security area during the purchasing transaction is the same product identified by the system after the system identifies the product via identification information input by a user of the system. The method includes querying the database for products having a time difference between the optimizing time and the last time greater than a predetermined period and having at least one new value for the characteristic, with the query establishing a query result. The method also includes revising

the value for each product in the query result using the new value.

The claimed invention allows a value of, for example, a physical characteristic of a product (e.g., weight), used as a security parameter in a security area of a self-checkout system for determining the correct identification of the product, to be updated upon one or more new values for the characteristic being determined.

The Cited Prior Art

Aggarwal et al. is understood by Applicants to be directed to a method for searching online product catalogs. The method includes performing similarity searches on searches performed by a shopper, where a similarity metric is adjusted during the search to interactively improve the relevance of the resulting search results to the shopper. Relevance feedback and/or product redefinition is used to learn an “implied concept” of the shopper’s stated product requirement. In other words, the quality of the search results is enhanced through understanding the concept implied by the shopper’s queries by learning from the product results marked as “relevant” or “irrelevant” (see Abstract, Fig. 2).

Jacobs is understood to disclose a self-checkout method and apparatus, which allows for self-checkout of non-bar-coded items, using a graphical-user-interface (GUI)(See Fig. 30).

Analysis

In order to establish a prima facie case of obviousness, three criteria must be met:

1. there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
2. there must be a reasonable expectation of success; and
3. the prior art references must teach or suggest all the claim limitation.

M.P.E.P. §2143.

Applicants respectfully submit that the obviousness rejection as set forth in the outstanding Action, fails with respect to the third criteria for obviousness: neither Aggarwal et al. nor Jacobs, when taken alone or in combination, teach or suggest (or discloses) all the claim limitations of the claimed invention. Specifically, neither reference discloses, teaches or suggests, either alone or in combination, querying a security database of a self-checkout system for products having a time difference between an optimizing time and a last time for a value of a characteristic associated with the product greater than a predetermined period and having at least one new value for the characteristic. Moreover, neither reference teaches or suggests (either alone or in combination) of revising the value for each product found in the results of the query with the new respective value.

Applicants respectfully submit that Aggarwal et al. has nothing to do with optimizing a value associated with a characteristic of a product in a security database of a self-checkout system. Rather, Aggarwal et al. appears only to relate learning an “implied concept” of a shopper’s product requirements to improve a “similarity search” to display a list of products similar to products that the shopper has previously selected in an online catalog environment. In contrast, the embodiments of the present invention like those claimed in claim 1, improve the ability of a self-checkout system to optimize a characteristic value of a product so that adequate recognition of the product may occur when it is placed in a security area of a self-checkout system. For example, this feature allows a self-shopping system to regularly (i.e., predetermined period) “self-adjust” (for example) a weight of a product used as a security parameter, should the weight of the product change due to a manufacturer changing, for example, a packaging material (e.g., glass to plastic).

Applicants respectfully note that none of the passages from Aggarwal et al. cited by the Examiner teach or suggest the indicated claim language. For example, the Examiner argues that column 4, lines 3-13 of Aggarwal et al., is the equivalent of the claim language, “said value being used in a comparison to a second value associated with said characteristic and detected in a security area of said self-checkout system during a purchasing transaction”. Applicants find this particular section of Aggarwal et al. to merely teach a shopper conducting a search of a product database for purchase, and a system providing an “initial set of similar search records found as a result of a similarity search based on said search request”

from the shopper and receiving “relevance feedback” from the shopper as to which products of the similar search are of greater and/or lesser relevance to the user compared with other similar search products. Applicants do not understand how that passage, or any portion of the Aggarwal et al. disclosure, teaches or suggests the respective indicated claim language argued by the Examiner.

Moreover, Applicants could find nothing in Aggarwal et al. to teach or suggest that the claimed query feature is based on products having a time difference between an optimizing time and a last time the value was updated, greater than a predetermined period.

Accordingly, in view of Applicants above arguments, Applicants respectfully submit that the independent claims are patentable over Aggarwal et al. and Jacobs. Since the remaining prior art of record fails to disclose the deficiencies of these references, Applicants respectfully submit that the independent claims are patentable over the art of record as well.

With regard to the dependent claims, since they necessarily incorporate by reference all the features recited in their respective base independent claims, they are also believed patentable for the same reasons. Accordingly, withdrawal of the prior art rejections for all the pending claims is now respectfully requested.

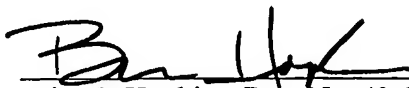
CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that the issues raised in the Office Action of October 5, 2004 have all been addressed, and that the present application is condition for allowance. Accordingly, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

It is believed that no additional fees are due with respect to the number of claims or extensions of time. In the event that it is determined that any additional fees are due in such respects, the Commissioner is hereby authorized to charge the undersigned’s Deposit Account No. 50-0311.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 692-6803. All correspondence should continue to be directed to our address given below.

Respectfully submitted,



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